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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590 04/11/2008			EXAMINER HUGHES, SCOTT A	
			ART UNIT 3663	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/532,644

**Applicant(s)**

BARAKAT, SIMON

**Examiner**

SCOTT A. HUGHES

**Art Unit**

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 38-45 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11-17 and 38-45 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/17/06 1/16/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of species A and a in the reply filed on 2/26/2008 is acknowledged. The traversal is on the ground(s) that the office failed to establish that there is no special technical feature. This is not found persuasive because the claims do not share a special technical feature as evidenced by the rejections presented below. Because no generic or independent claim is allowed, the species restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.  
Claims 8 and 10 are withdrawn as being directed to non-elected species.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: Claim 1 recites "each independent pathways containing" when it should read "each independent pathway containing" or "each of the independent pathways containing." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 11-17, 38, and 40-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (6219620).

With regard to claim 1, Park discloses a seismic survey system (abstract). Park discloses a plurality of data sources 10 positioned about an area to be surveyed, each data source being associated with a transmitter (wireless telemetry for DAU) capable of transmitting data (Column 2, Line 21 to Column 3, Line 40) (Fig. 1). Park discloses a plurality of cells 14 each containing a portion of the data sources 10 and their associated transmitters, one of the transmitters 16 within each cell also serving as a gateway for receiving data transmitted from the other data source transmitters 10 within the cell (Column 2, Lines 21-44; Column 3, Lines 2-55) (Figs. 1-3). Park discloses a plurality of independent pathways each independent pathway containing at least one gateway 16 whereby data may be transmitted along each pathway via at least one gateway in that pathway without consolidation of the data (compression can be done at data source 10 before transmission along a pathway, but Park also allows for no compression to be done at all which would simply require a larger bandwidth) (Column 2, Lines 21-44; Column 3, Lines 2-55) (Figs. 1-3).

The "whereby data may be transmitted" clause is essentially a method limitation or statement of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2d 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

With regard to claim 2, Park discloses the transmitter wirelessly transmitting data (Column 2, Lines 1-4; Column 3).

With regard to claim 3, Park discloses a computing and storing center (CCU) 12 for receiving the data transmitted along each pathway (Fig. 1) (Column 2, Lines 21-33; Column 3; Column 4, Lines 10-47).

With regard to claim 4, Park discloses at least a pair of relay points along which data is transmitted to the computing and storing center (Columns 3-4) (Figs. 1-3).

With regard to claim 5, Park discloses a fixed base facility 12 to which the data is transmitted (Fig. 1) (Column 2, Lines 21-33; Column 3; Column 4, Lines 10-47).

With regard to claim 7, Park discloses asynchronous transmission (Column 3, Line 26 to Column 4, Line 9).

With regard to claim 11, Park discloses that the distance between gateways of adjacent cells is limited according to transmission licensing constraints (Column 3, Lines 9-40).

With regard to claim 12, Park discloses that the distance between gateways of adjacent cells is limited to improve reliability (Column 2, Line 27 to Column 3, Line 40).

With regard to claim 13, Park discloses that the pathways are substantially linear (Figs. 1-3) (Column 3).

With regard to claim 14, Park discloses that the cells 14 overlap (Fig. 1).

With regard to claim 15, Park discloses that the cells 14 are interleaved (Figs. 1, 3) (Column 2, Line 27 to Column 3, Line 40).

With regard to claim 16, Park discloses that no gateway in a path directly receives from or transmits to more than one gateway (Column 2, Line 27 to Column 3, Line 40).

The "wherein no gateway in a path" clause is essentially a method limitation or statement of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2d 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

With regard to claim 17, Park discloses that at least one cell can also rely data from another cell (Column 3).

With regard to claim 38, Park discloses a method for use in seismic surveying (abstract). Park discloses collecting a plurality of seismic data at a plurality of seismic data sources 10, each data source being associated with a transmitter (wireless transmitter) capable of transmitting the data (Column 2, Line 21 to Column 3, Line 40) (Fig. 1). Park discloses the seismic data sources being organized into a plurality of cells

14 (Fig. 1) (abstract). Park discloses one of the transmitter 16 within each cell also serving as a gateway for receiving data transmitted from other data source transmitters within the cell (Column 2, Lines 21-44; Column 3, Lines 2-55) (Figs. 1-3). Park discloses transmitting the collected data over a plurality of independent pathways to a central location 12 (Fig. 1), each independent pathway containing at least one gateway whereby data may be transmitted along each pathway via the at least one gateway without consolidation of the data (compression can be done at data source 10 before transmission along a pathway, but Park also allows for no compression to be done at all which would simply require a larger bandwidth) (Column 2, Lines 21-44; Column 3, Lines 2-55) (Figs. 1-3). Park discloses collecting the transmitted seismic data at the central location (Column 2, Lines 21-44; Column 3, Lines 2-55).

With regard to claim 40, Park discloses that the cell definitions are constrained within transmission licensing constraints (Column 3, Lines 9-40).

With regard to claim 41, Park discloses that the distance between cells is constrained to improve reliability (Columns 2-4).

With regard to claim 42, Park discloses that the cell 14 overlap (Fig. 1).

With regard to claim 43, Park discloses that the cells are interleaved (Figs. 1, 3) (Column 2, Line 27 to Column 3, Line 40).

With regard to claim 44, Park discloses at least a pair of relay points along which data is transmitted to the central location (Columns 3-4) (Figs. 1-3).

With regard to claim 45, Park discloses that no gateway in a path directly receives from or transmits to more than one gateway (Column 2, Line 27 to Column 3, Line 40).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park as applied to claim 1 above, and further in view of Read (4885724).

With regard to claim 6, Park does not disclose a recording truck through which data is transmitted to the fixed base facility. Read teaches that it is known to use a recording truck at the survey site to record data and send commands to field units (abstract; Columns 7-8) (Fig. 1B). It would have been obvious to modify Park to include a recording truck as taught by Read in order to have a mobile unit that can collect all data from a survey area and can send commands to the equipment in the survey area.

Claims 9 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Park as applied to claims 1 and 38 above, and further in view of Longaker (6226601).

With regard to claims 9 and 39, Park does not specifically disclose using frequency division multiplexing. Longaker teaches that it is known in wireless seismic



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data transmission to use frequency division multiplexing when sending data (Column 3). It would have been obvious to modify Park to use frequency division multiplexing as taught by Longaker in order to be able to reuse transmission frequencies in the cellular groups.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. HUGHES whose telephone number is (571)272-6983. The examiner can normally be reached on M-F 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. H./  
Examiner, Art Unit 3663

/Jack W. Keith/  
Supervisory Patent Examiner, Art Unit 3663